

AMENDMENTS TO CLAIMS

There were two claims originally numbered 36. The second claim 36 is removed and added as new claim 40. New claim 41 is also added. Claims 3, 10, 16 and 35 are canceled. Claims 1, 2, 4-8, 11-15, 19-21, 29, 30 and 34 are amended, as shown below. All pending claims are reproduced below, including those that remain unchanged.

1. (Currently Amended): An ion generator comprising:
 - a first electrode;
 - a second electrode; and
 - a voltage generator ~~electrically coupled~~ to provide a voltage potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode;
 - wherein said first electrode is one of (1) slack, (2) ~~has curves~~ curved, and (3) is coiled and spans a distance, and wherein said first electrode has a length that is at least fifteen percent greater than said distance.
2. (Currently Amended): An ion generator comprising:
 - a first electrode;
 - a second electrode;
 - a voltage generator ~~electrically coupled~~ to provide a voltage potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode;

wherein said first electrode is slack and spans a distance, and wherein said first electrode has a length that is at least fifteen percent greater than said distance.

3. (Canceled)

4. (Currently Amended): The ion generator of claim 2 wherein said length of said first electrode ~~has a length that is about~~ is between fifteen percent to thirty percent greater than ~~if the first electrode were taught~~ said distance.

5. (Currently Amended): An ion generator comprising:

a first electrode;

a second electrode; and

a voltage generator ~~electrically coupled~~ to provide a voltage potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode;

wherein said first electrode is a coil and spans a distance, and wherein said first electrode has a length that is at least fifteen percent greater than said distance.

6. (Currently Amended): The ion generator of claim 5 wherein said first electrode is at least two ~~time~~ times longer than ~~if the first electrode were taught~~ said distance.

7. (Currently Amended): The ion generator of claim 5 wherein said first electrode is between ~~about~~ two to ~~about~~ three times longer than ~~if the first electrode were taught~~ said distance.

8. (Currently Amended): An ion generator comprising:

a first electrode;

a second electrode; and

a voltage generator ~~electrically coupled~~ to provide a potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode;

wherein said first electrode has a plurality of curves and spans a distance, and wherein said first electrode has a length that is at least fifteen percent greater than said distance.

9. (Original): The generator of claim 8 wherein said plurality of curves are in the same plane.

10. (Canceled)

11. (Currently Amended): An ion generator comprising:

a first means for providing an electrode having a length that is at least fifteen percent greater than a distance that the electrode spans ~~which has an length greater than if the electrode were taught~~;

a second electrode; and

a voltage generator ~~electrically coupled~~ to provide a potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode.

12. (Currently Amended):In an ion generator comprising a first electrode that spans a distance and a second electrode, and a voltage generator ~~electrically coupled~~ to provide a voltage potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode, the improvement including:

said first electrode being slack so that its length is at least fifteen percent greater than said distance that said first electrode spans, in order to ~~enhanced~~ enhance emissivity.

13. (Currently Amended):In an ion generator comprising a first electrode that spans a distance and a second electrode, and a voltage generator ~~electrically coupled~~ to provide a voltage potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode, the improvement including:

said first electrode including a plurality of curves that cause its length to be at least fifteen percent greater than said distance in order to ~~enhanced~~ enhance emissivity.

14. (Currently Amended):In an ion generator comprising a first electrode and a second electrode, and a voltage generator ~~electrically coupled~~ to provide a voltage potential difference between the first electrode and the second electrode in order, when energized, to create a flow of

air in a downstream direction from the first electrode to the second electrode, the improvement including:

said first electrode being coiled so that its length is at least fifteen percent greater than the distance that said first electrode spans, in order to ~~enhanced~~ enhance emissivity.

15. (Currently Amended): A method for generating ions including the steps of:

providing a first electrode that is ~~one of (1) slack, (2) has curves and (3) has coils~~
sufficiently slack, curved or coiled such that its length is at least fifteen percent greater than a distance that said first electrode spans;

providing a second electrode; and

providing a voltage generator ~~electrically coupled~~ to provide a potential difference between the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode.

16. (Canceled)

17. (Original): The generator of claim 1 wherein said first electrode is an ion emitter and the second electrode is a collector of particulate matter.

18. (Original): The generator of claim 1 wherein said first electrode is positively charged and the second electrode is negatively charged.

19. (Currently Amended): The method of claim 15, including providing a said first electrode such that its said length is about between two to about three times longer than if the first electrode were taught said distance.

20. (Currently Amended): A device for conditioning air including
a housing with an air inlet and an air outlet;
a first electrode;
a second electrode;
said first electrode located closer to said air inlet than said second electrode;
said second electrode located closer to said air outlet than said first electrode; and
a potential generator electrically coupled to the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode; and
wherein said first electrode is one of (1) slack, (2) has curves, and (3) is coiled spans a distance, and wherein said first electrode is sufficiently slack, curved or coiled such that its length is at least fifteen percent greater than said distance.

21. (Currently Amended): A device for conditioning air including
a housing with an air inlet and an air outlet
a first means for providing ~~an~~ a first electrode having a length that is at least fifteen percent greater than a distance that the first electrode spans ~~which has an length greater than if the electrode were taught;~~
a second electrode;

said first electrode located closer to said air inlet than said second electrode;

said second electrode located closer to said air outlet than said first electrode; and

a potential generator electrically coupled to the first electrode and the second electrode in order, when energized, to create a flow of air in a downstream direction from the first electrode to the second electrode.

22. (Original): The generator of claim 1 wherein when said voltage generator is energized, ions are generated at said first electrode and directed toward said second electrode.

23. (Original): The ion generator of claim 1 wherein said second electrode is removable by a user for cleaning.

24. (Original): The generator of claim 1 wherein said generator is incorporated in a housing, and said housing comprises an electro-kinetic air transporter-conditioner.

25. (Original): The generator of claim 1 wherein said generator is incorporated in a housing and, said housing comprises an electro-kinetic air transporter-conditioner and said housing has a top and said second electrode is removable from said top for cleaning.

26. (Original): The generator of claim 1 wherein:

said generator is incorporated in an elongated freestanding housing with a top, and said housing comprises an electro-kinetic air transporter-conditioner; and

wherein said second electrode is elongated and is removable from said top of said housing.

27. (Original): The generator of claim 1 wherein:

said generator is incorporated in an elongated housing with a top and, said housing comprises an electro-kinetic air transporter-conditioner; and

wherein said second electrode is elongated and is at least partially removable from said top of said housing.

28. (Original): The generator of claim 1 wherein:

said generator is incorporated in an elongated freestanding housing with a top, and said housing comprises an electro-kinetic air transporter-conditioner; and

wherein said second electrode is elongated and is telescopingly removable through said top of said housing.

29. (Currently Amended): A device for conditioning air, comprising:

a housing having an inlet and an outlet;

an ion generator disposed within said housing, that creates an airflow in a downstream direction, when energized, from said inlet to said outlet, including:

a first electrode that spans a distance within said housing, said first electrode created from a wire-shaped element, and formed into a coil-shape such that a length of said electrode is at least fifteen percent greater than said distance;

a second electrode located downstream of said first electrode;

a high voltage generator electrically coupled to said first and second electrode.

30. (Currently Amended): The device as recited in claim 29, wherein said wire-shaped element has a ~~total~~ length two to three times greater than said distance that the height of said first electrode spans.

31. (Original): The device as recited in claim 29, wherein the diameter of said coil-shape is approximately ten times greater than the diameter of said wire-shaped element.

32. (Original): The device as recited in claim 29, wherein said first electrode is an ion emitting surface, that can electrically charge particles contained within the airflow.

33. (Original): The device as recited in claim 29, wherein said second electrode has a polarity opposite of said first electrode, which second electrode collects the electrically charged particles.

34. (Currently Amended): A device for conditioning air, comprising:

a housing having an inlet and an outlet;

an ion generator disposed within said housing, that creates an airflow in a downstream direction, when energized, from said inlet to said outlet, including:

a first electrode that spans a distance within said housing, said first electrode created from a wire shaped element, and formed into a curved configuration such that a length of said electrode is at least fifteen percent greater than said distance;

a second electrode located downstream of said first electrode;

a high voltage generator electrically coupled to said first and second electrode.

35. (Canceled):

36. (Original): The device as recited in claim 34, wherein said first electrode is an ion emitting surface that can electrically charge particles contained within the airflow.

~~36. (Original): The device as recited in claim 36, wherein said second electrode has a polarity opposite of said first electrode, which second electrode can collect the electrically charged particles.~~

37. (Original): The device of claim 21 wherein said housing has as top and said second electrode is removable through said top.

38. (Original): The device of claim 21 wherein said housing is an elongated freestanding housing with a top and said second electrode is removable through said top of said housing.

39. (Original): The device of claim 21 wherein said housing is an elongated housing with a top and said second electrode is removable through said top of said housing.

40. (New): The device as recited in claim 36, wherein said second electrode has a polarity opposite of said first electrode, which second electrode can collect the electrically charged particles.

41. (New): An ion generator comprising:

- a first electrode that spans a distance;
- at least two second electrodes that each include a substantially flat surface, each substantially flat surface being substantially parallel to one another; and
- a voltage generator to provide a potential difference between said first electrode and said second electrodes;

wherein said first electrode has a plurality of curves that cause a length of said first electrode to be longer than said distance, said plurality of curves being in a same plane, said plane being parallel to said substantially flat surfaces of said second electrodes.